

Appln. Serial No. 09/882,581
Amendment Dated December 14, 2006
Reply to Office Action Mailed September 14, 2006

CURRENT LISTING OF CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1 1. (Previously Presented) A health assessor for assessing health of a target element
2 within a multi-element system, comprising:

3 a plurality of sensors, each being operatively coupled to the target element to
4 produce a measure of the target element;

5 a plurality of measure collectors, each collecting a measure from one of the
6 sensors, wherein each of the collectors also stores the measure as historical measure;

7 a plurality of evaluators, each evaluating at least a subset of all the measures
8 collected by the measure collectors in accordance with a pre-configured evaluation definition for
9 the respective evaluator to provide an assessment;

10 a probabilistic reasoning network coupled to the evaluators to receive the
11 assessment from each of the evaluators and to analyze the assessments in accordance with a pre-
12 configured reasoning definition so as to provide an overall probabilistic health assessment of the
13 target element,

14 the probabilistic reasoning network to analyze the assessments from the
15 evaluators according to information indicating reliabilities of the respective evaluators.
16

1 2. (Original) The health assessor of claim 1, wherein the evaluation definition of an
2 evaluator determines which of the measures collected by all of the measure collectors are to be
3 received by the respective evaluator.

1 3. (Previously Presented) The health assessor of claim 1, wherein each of the
2 evaluators further comprises

3 an evaluation definition store that stores the pre-configured evaluation definition
4 of the evaluator;

5 an evaluation module coupled to the evaluation definition store to provide the
6 assessment by statistically comparing the subset of the measures and the historical measures
7 based on the pre-configured evaluation definition.

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1 4. (Original) The health assessor of claim 3, wherein the operation of an evaluator
2 can be changed by replacing the pre-configured evaluation definition for that evaluator with a
3 new evaluation definition.

1 5. (Original) The health assessor of claim 1, wherein the reasoning network is a
2 Bayesian network probabilistic reasoning network.

1 6. (Previously Presented) The health assessor of claim 1, wherein the overall
2 probabilistic health assessment of the target element is a probability that the target element is
3 healthy.

1 7. (Cancelled)

1 8. (Previously Presented) The health assessor of claim 1, wherein the operation of the
2 probabilistic reasoning network can be changed by replacing the pre-configured reasoning
3 definition with a new reasoning definition.

1 9. (Previously Presented) A health assessment system for assessing health of a
2 target element within a multi-element system, comprising:
3 a health assessment engine that receives measures of the target element, the health
4 assessment engine having a probabilistic reasoning network to provide health assessment of the
5 target element based on the received measures and historical measures of the target element,
6 wherein the historical measures have already been stored in the health assessment engine;
7 a result formatting module that formats the health assessment into a report;
8 a web interface that transmits the formatted report to a remote access system via
9 the Internet.

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1 10. (Previously Presented) The health assessment system of claim 9, wherein the
2 health assessment engine further comprises
3 a plurality of sensors, each being operatively coupled to the target element to
4 produce a measure of the target element;
5 a plurality of measure collectors, each collecting a measure from one of the
6 sensors, wherein each of the collectors also stores the measure as historical measure;
7 a plurality of evaluators, each evaluating at least a subset of all the measures
8 collected by the measure collectors in accordance with a (1) pre-configured evaluation definition
9 for the respective evaluator and (2) at least a subset of all historical measures of the target
10 element that have already been stored in the collector to provide an assessment;
11 wherein the probabilistic reasoning network is coupled to the evaluators to receive
12 the assessment from each of the evaluators and to analyze all the assessments in accordance with
13 a pre-configured reasoning definition so as to provide an overall health assessment of the target
14 element.

1 11. (Previously Presented) The health assessment system of claim 10, wherein each of
2 the evaluators further comprises
3 an evaluation definition store that stores the pre-configured evaluation definition
4 of the evaluator;
5 an evaluation module coupled to the evaluation definition store to provide the
6 assessment by statistically comparing the subset of the measures and the historical measures
7 based on the pre-configured evaluation definition.

1 12. (Original) The health assessment system of claim 11, wherein the operation of an
2 evaluator can be changed by replacing the pre-configured evaluation definition for that evaluator
3 with a new evaluation definition.

1 13. (Previously Presented) The health assessment system of claim 9, wherein the
2 probabilistic reasoning network is a Bayesian network probabilistic reasoning network.

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1 14. (Previously Presented) The health assessment system of claim 13, wherein the
2 probabilistic reasoning network further comprises a reasoning definition store that stores a
3 pre-configured reasoning definition, wherein the pre-configured reasoning definition defines how
4 the probabilistic reasoning network should analyze all the assessments received from the
5 evaluators to produce the overall health assessment of the target element

1 15. (Original) The health assessment system of claim 14, wherein the operation of
2 the probabilistic reasoning network can be changed by replacing the pre-configured reasoning
3 definition with a new reasoning definition.

1 16. (Previously Presented) The health assessment system of claim 9, wherein the
2 remote access system is the target element.

1 17. (Previously Presented) The health assessment system of claim 9, wherein the
2 remote access system is a remote access terminal or an application.

1 18. (Previously Presented) The health assessor of claim 1, wherein the evaluation
2 definition of a first one of the evaluators specifies that the first evaluator is to receive measures
3 from a first group of the measure collectors, and the evaluation definition of a second one of the
4 evaluators specifies that the second evaluator is to receive measures from a second, distinct
5 group of the measure collectors.

1 19. (Previously Presented) The health assessment system of claim 9, wherein the
2 health assessment engine further comprises sensors to provide the measures, measure evaluators
3 to provide assessments based on the measures from the sensors and the historical measures,
4 wherein the probabilistic reasoning network generates the health assessment
5 based on the assessments provided by the measure evaluators and based on information
6 indicating trustworthiness of respective measure evaluators.

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- 1 20. (Previously Presented) The health assessment system of claim 9, wherein the
- 2 result formatting module formats the health assessment into an XML report.